Atalanta, Bd. XI, Heft 4, November 1980, Würzburg, ISSN 0171-0079

Studies on the family Lycaenidae
III. A Review of the subspecies of Agrodiaetus (Sublysandra) myrrhus (HERRICH-SCHAEFFER, 1852)

Lycaeniden-Studie
III. Ein Überblick über die Unterarten von Agrodiaetus myrrhus (HERRICH-SCHAEFFER, 1852)

(Lep. Lycaenidae)
by
AHMET ÖMER KOÇAK

Zusammenfassung
In der vorliegenden Arbeit werden zwei neue Unterarten von *Agrodiaetus myrrhus* H.-SCH. aus der Osttürkei beschrieben und bisher bekannten Unterarten der Art nachgeprüft. Eine Bestimmungstabelle der Unterarten nach äußeren Merkmalen wird aufgestellt.

In this paper hithertho known subspecies of *Agrodiaetus myrrhus* (HERRICH-SCHAEFFER) are revised, and also two new subspecies, *araxiana* n. subsp. and *noacki* n. subsp. from East Turkey are described.

Materials of this species were collected by Mr. H. NOACK from the vicinity of Van Lake (Bitlis Prov., E. Turkey) (now deposited in „Landessammlungen für Naturkunde, Karlsruhe", and by Mr. W. ECKWEILER from North-East Turkey in recent years. Several specimens were also here included, which I collected from various parts of Central and East Turkey.

I would like to thank Mr. G. EBERT (Karlsruhe) and Mr. W. ECKWEILER (Frankfurt) as they would kindly allow me to study their materials.

Agrodiaetus (Sublysandra) myrrhus myrrhus (H.-SCH., 1852)

Lycaena myrrha HERRICH-SCHAEFFER, 1852 Syst. Bearb. 6: 26 Suppl. fig. 508-511 „Kleinasien".

Hitherto known localities of nominate subspecies are only Amasya (STAUDINGER, 1878) and Erciyas Dağl (REBEL, 1905). Although in HERRICH-SCHAEFFERs publication the type locality of *myrrhus* was not indicated exactly, it is hoped that type specimens came from the vicinity of Amasya as some others. In addition I collected two males from two different places in the woodland zone of Ankara Prov., and again from the alpine zone of Erciyas Dağl (Kayseri Prov.). Besides I have recently noticed a single male of *myrrhus* (from Sivas), which is placed among the specimens of *Polyommatus eros* OCHS. in „Zoologische Staatssammlung, München". All the above mentioned specimens agree entirely with the description and figure of *myrrhus* HERRICH-SCHAEFFER,

and according to this materials the nominate subspecies is shortly redescribed in the following way:

Males: forewing: 17,5-19 mm, average 17,85 ± 0,55 (SD).
Upperside of wings: Ground colour as blue as European *Meleageria daphnis* SCHIFF. Blackish marginal band on forewing broad, ca. 1.5-2 mm wide, on hindwing finely developed. Discoidal spot on forewing blackish, very small but visible. Blackish antemarginal dots on hindwing more or less developed. Ciliae almost uniformly white.

Underside of wings: Ground colour greyish light brown. Base of hindwing bluish. Basal, discoidal and postdiscal black spots normally developed on both wings. Whitish marking on submarginal area of hindwing well defined. Orange submarginal lunules always present, generally well developed on hindwing; on forewing submarginal markings dark brown, without orange lunules.

Females: Unfortunately I have never seen the female of *myrrhus*, but HERRICH-SCHAEFFER described the female as follows:
„Das Weib mit bleichen Ringen vor dem Saume aller Flügel, deren innere Hälfte kaum etwas röthlich. Unter das Roth der Vorderflügel verloschener als bei *Alexis*".

Material examined:
1 ♂ N. Turkey, Ankara Prov., vic. Karagöl, VI.1971; 1 ♂ Ankara Prov., Kizilcahamam Azap Deresi, 1300 m, 30.VI.1975; 2 ♂♂ C. Turkey, Kayseri Prov., Erciyas Dağl, 2200-2400 m, 18.VIII.1976 A. KOÇAK leg. 1 ♂ „Amasia, MAX BARTEL" ex coll. NOACK (LNK), 2 ♂♂ „Amasia" ex coll. DAUB (LNK), 1 ♂ „Ak dagh mont., Wil. Siwas, Asia min. Juli 2000 m." (ZSM).

Agrodiaetus (Sublysandra) myrrhus myrrhinus (STAUDINGER, 1901)

Lycaena myrrha myrrhina STAUDINGER, 1901 Cat. Lep. Pal. **3**(1): 81
„♂ supra caeruleo-viridescens, al. ant. extus obscurioribus. Pont. or. (Gümüschane)".

Redescription:
Males: (8 ♂♂ collected from vicinity of Gümüshane)
Forewing: 17-19 mm, average 18,18 mm, ± 0,84 (SD).
Upperside of wings: Ground colour greenish blue, not so greenish in tone as *araxianus*. Blackish discoidal spot on forewing small but always visible, dark marginal band broad somewhat variable, values measured from space of M3-Cu1 are given below:

Range: 2,5-4,5 mm, average 3,31 ± 0,65 (SD).

Ciliae on hindwing uniformly white, on forewing white but dark brown basally.

Underside of wings: Ground colour varies from light yellowish sandy brown to light greyish brown. Usual black spots normally developed, creamy triangular marking on hindwing distinct, submarginal markings well developed, yellowish

orange submarginal lunules generally present.

Materials which were collected by Mr. W. ECKWEILER from the vicinity of Ispir and Erzurum (Palandöken Dağlari) agree entirely with the specimens from Gümüshane, therefore I determine them as subsp. *myrrhus* STAUDINGER. Their quantitativ analysis are presented below:

Materials:

I) 24 ♂♂ (from Cabans (Ispir))

a) Forewing length 15-20 mm, average 18,43 $\pm$ 1,14 (SD).
b) Width of marginal band in space of M3-Cu1 on forewing 205 mm, average 3,43 $\pm$ 0,63 (SD).
c) Width of black marginal line between Cu1-Cu2 on upperside of hindwing 0,15-0,35 mm, average 0,21 $\pm$ 0,08 (SD).
d) Length of the black marginal dot between Cu1 and Cu2 on upperside of hindwing 0-1,0 mm, average 0,49 $\pm$ 0,32 (SD).
e) Orange lunules on underside of hindwing: In 4,16 % of individuals well developed, in 41,66 % little developed, in 54,16 % of individuals orange lunules could not be observed.

II) 49 ♂♂ (from Erzurum)

a) Forewing length 15,5-19,6 mm, average 17,69 $\pm$ 0,90 (SD).
b) Width of marginal band in space of M3-Cu1 in forewing 2-8,5 mm, average 3,58 $\pm$ 0,69 (SD).
c) Width of black marginal line between Cu1-Cu2 on upperside of hindwing 0,10-0,35 mm, average 0,19 $\pm$ 0,05 (SD).
d) Length of the black marginal dot between Cu1-Cu2 on upperside of hindwing 0-1,0 mm, average 0,43 $\pm$ 0,33 (SD).
e) Orange lunules on underside of hindwing: In 55,10 % of individuals orange lunules little developed, in 44,89 % orange lunules are absent.

Ground colour of all these males are somewhat variable; in a few specimens they change into a slightly more bluish tone than in others, but not so blue as in *myrrhus*.

Description of the female of subsp. *myrrhinus* STAUDINGER:

Allotype (♀) Forewing 18 mm. Upperside of wings: Ground colour brown, lighter in tone than that of *araxiana*, greenish scales poorly developed at basal area. Discoidal spot on forewing dark brown, well marked. Orange and dark brown submarginal markings appear only at anal part of hindwing.

Underside of wings: Ground colour light brown, metallic greenish scales restricted to basal area of hindwing. Basal spots of forewing small but visible. Creamy triangular marking well marked. Discoidal and postdiscal spots blackish, medium sized, each creamy ringed. Dark brown submarginal markings well developed on both wings but orange lunules appear only on hindwing. Ciliae light brown.

Allotype was collected by the author from Gümüshane Prov., vic. Köse 1750 m

17.VII.1973 and deposited in the collection of University of Ankara.

Other females of *myrrhinus* which were collected by Mr. ECKWEILER are:

a) 8 ♀♀ (from Cabans)
Forewing length 14-18 mm, average 16,56 ± 1,49 (SD).
Except two females, they have any greenish suffusion on their basal part of upperside of wings. Other characters agree with those of allotype.

b) 2 ♀♀ (from Nahizer). Forewing length 18-19 mm. Similar to allotype.

c) 46 ♀♀ (from Erzurum) Forewing length 12-18 mm, average 16,34 ± 1,44 (SD)

In one female upperside of wings with blue, a few females with greenish suffusion, others have not such suffusion on their wings. This blue suffusion of female, which appears rarely among east Anatolian populations, seems to be a phenomenon appeared by reason of the gene-flow between *myrrhus* and *myrrhinus* populations. On the other hand, coloration of such suffusion on the upperside appears to be partly in harmony with the basal suffusion on the underside of wings. Two males and one female from the population of Erzurum and one male from Ispir exhibit this feature.

As to the ground colour of upperside of males, it appears to vary slightly in the populations of Erzurum and Ispir. As has been already mentioned above, the uppersides of a few males are more bluish in tone than others. On the other hand, I collected a single male from Tunceli Province, on the roadside of Tunceli-Ovacik ca. 1200 m, showing on the upperside of its wings, almost similar coloration as *araxiana*. As the other characteristics correspond to the description of *myrrhinus* mentioned above, I labelled it as subsp. *myrrhinus* (fw. 19 mm; marginal band on fw. 2 mm; marginal line on upperside of hw. 0,2 mm; length of black marginal dot on hw. 0,7 mm; orange lunules on underside absent).

On the other hand, two males, which were collected by Prof. Dr. K. ROSE from Tanyeri (in coll. LNK) are treated as subsp. *myrrhinus*. Their values are: Fw. 17-17,5 mm; marginal band on fw. 2,2-2,5 mm; marginal line on upperside of hw. 0,15-0,20 mm; length of black marginal dot on upperside of hw. 0,5-0,7 mm; orange lunules on underside are absent.

Dark marginal band on upperside of forewing of male does not appear to be significant taxonomically, although it was attributed to *myrrhinus* as a subspecific character (cf. STAUDINGERs original description above). It varies remarkably among the individuals as well as populations of *myrrhinus*. The value of C.D. (Coefficient of difference) was calculated for each populations of *myrrhinus* and also the type series of *araxiana* and *noacki* (cf. MAYR et al. 1953: 146-147). Results are given below:

Compared populations	Value of C.D.	Joint nonoverlap, per cent
myrrhinus (Gümüshane) *araxiana* (Akçay)	0,67	75

myrrhinus (Gümüshane) *noacki* (Van Lake)	0,75	75-80
myrrhinus (Erzurum) *araxiana* (Akçay)	0,87	80-82
myrrhinus (Erzurum) *noacki* (Van Lake)	0,92	82-84
myrrhinus (Ispir) *araxiana* (Akçay)	0,78	75-80
myrrhinus (Ispir) *noacki* (Van Lake)	0,85	80-82
araxiana (Akçay) *noacki* (Van Lake)	0,17	<75

According to MAYR, the conventional level of subspecific difference for the value of CD is 1,28. The values calculated above are below this proposed subspecific distinctness. It is, however, to be noted that the dark marginal band of forewing is more significant for the populations of *myrrhinus* rather than *araxiana* and *noacki* (cf. value of CD between *araxiana* and *noacki*).

Material examined: 8 ♂♂, 1 ♀ NE. Turkey, Gümüshane Prov., vic. Köse 1750 m, 17.VII.1973; 1 ♂ E. Turkey, Tunceli Prov. Munzur suyu 1200 m, 14.VII.1973 A. KOÇAK leg.; 2 ♂♂ Nordostanatolien: Tanyeri 38 km östl. Erzincan 1250 m 22.-27.VI.1977 (in coll. LNK) Prof. Dr. K. ROSE leg.; 24 ♂♂, 8 ♀♀ „Türkei, Erzurum, Ispir/Cabans 2200-2400 m, 11.-16.VIII.1976 and 7.VIII.1977, W. ECKWEILER leg."; 2 ♀♀ „Türkei, Erzurum, Ispir/Nahizer 1700-1900 m, 4.-8. VIII.77 ECKWEILER leg."; 49 ♂♂, 46 ♀♀ „Türkei, Erzurum 2300-2500 m, 14. VII.-2.VIII.77 ECKWEILER leg.".

Agrodiaetus (Sublysandra) myrrhus **araxiana** n. subsp.

Holotype (♂), forewing 17 mm. Upperwide of wing (fig. 6): Ground colour shining greenish in tone; it is similar to that of *Agrodiaetus phyllis phyllis*. Basal parts slightly suffused with bluish. Marginal band broad (3 mm in width). Marginal line on hindwing between Cu1-Cu2 0,25 mm in width. Antemarginal black dots well marked one of them, between Cu1 and Cu2 0,7 mm in length. Discoidal spot on forewing dark brown, well marked. Ciliae almost completely white, only towards apical area of forewing slightly brownish basally.

Underside of wing (fig. 7): Ground colour dark greyish brown. Basal part of hindwing suffused with greyish blue scales. Usual black spots slightly larger on forethan hindwing. Whitish triangular marking on hindwing distinct. Submarginal markings dark brown, without orange lunules.

Allotype (♀), forewing 15 mm. Upperside of wing (fig. 8): Ground colour dark brown. Blackish brown discoidal spot on forewing well developed. Traces of sub-

marginal markings visible on both wings. Ciliae uniformly light brown.

Underside of wing (fig. 9): Ground colour brown. Metallic greenish scales remarkably restricted to basal area of hindwing. Usual black spots much larger on fore- than hindwing, all ringed by creamy scales. Cream triangular marking on hindwing very well developed. Submarginal markings well marked on both wings but reddish orange lunules appear only on hindwing.

Paratypes ♂♂, forewing 14,5-17 mm, average 15,77 ± 0,69 (SD). Ground colour of upperside as in holotype. Discoidal spot on forewing more or less developed, but always visible. Dark marginal band on forewing slightly varies in width. Values which were measured from M3-Cu1 are as follows: Range 1,5-4 mm, average 2,49 ± 0,56 (SD).

Marginal line on upperside of hindwing between Cu1 and Cu2 are: Range 0,10-0,30 mm, average 0,18 ± 0,05 (SD).

Length of antemarginal black dot of hw. between Cu1 and Cu2 are: Range 0,10-1,00 mm, average 0,55 ± 0,15 (SD).

Orange submarginal lunules on underside of hindwing in 2,85 % of individuals well developed, in 57,14 % of individuals little developed in 40 % of individuals orange submarginal lunules are absent. (Measurements were based upon 70 males).

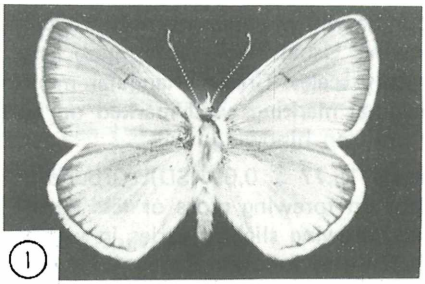
♀♀ Forewing: 13-15,5 mm, average 14,22 ± 0,70 (SD) (24 ♀♀ were measured).

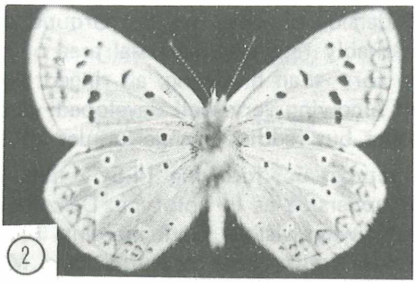
Upperside of wing: Orange lunules of submarginal area variable, namely in 24% of individuals orange lunules hardly visible on forewing, in the rest orange lunules absent; in 40 % of individuals orange lunules more or less developed on hindwing, in others absent. One female with very pale brown coloration appears to be an individual form among a good few specimens from Akçay. Otherwise all females are similar to allotype. Underside of wing: Similar to allotype.

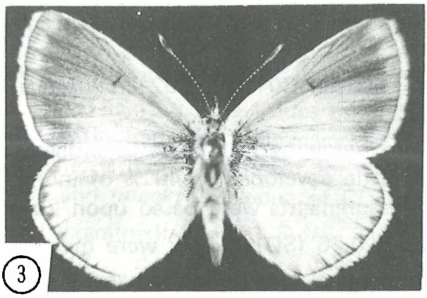
Type Material: Holotype (♂), Allotype (♀) and many ♂♂ and ♀♀ (Paratypes) were collected by ECKWEILER from „Türkei, Kars, Akçay 1500-1700 m, 22.-28.VII.76 and 19.VII.78". Holotype, Allotype and most of Paratypes are in coll. ECKWEILER. Other Paratypes are in „Landessammlungen für Naturkunde, Karlsruhe", „Zoologische Staatssammlung, München" in coll. of Department of Systematic Zoology, Ankara, K. ROSE and SCHURIAN.

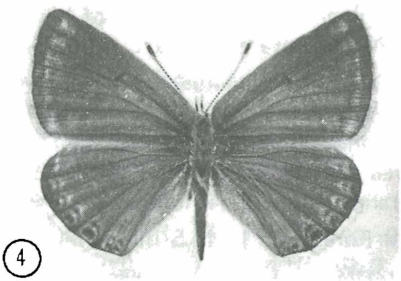
Apart from the type series mentioned above, I labelled one male from „Kagizman mount 2500 m, Juni", existing in DAUBs collection (LNK), and also one male one female with the same labels (in ZSM) as paratypes.

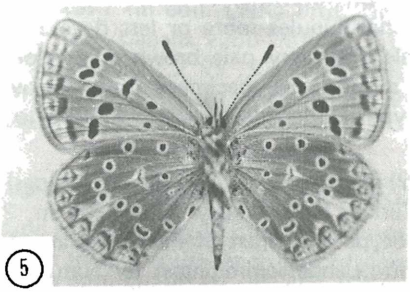
It should be noted here that 2 ♂♂, 1 ♀ collected by me from the woodland zone of mountainous area between Sarikamis and Karakurt in Kars Province, are nearer to *myrrhinus* than *araxiana*. Forewing is larger (in 2 ♂♂, 17-18 mm, 1 ♀ 18 mm) and dark marginal band on forewing of males remarkably broader (3-3,5 mm) than in *araxiana*. This indicates that *araxiana* is confined to Aras Mountain Range in NE. Turkey.

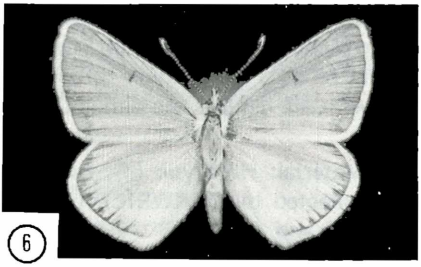


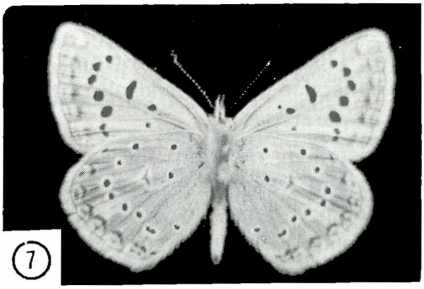


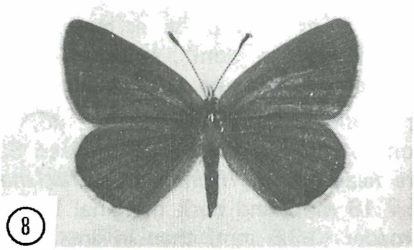


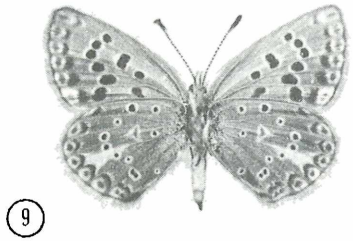








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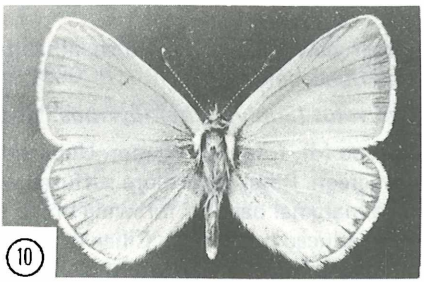
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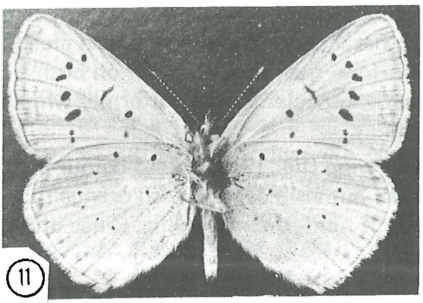
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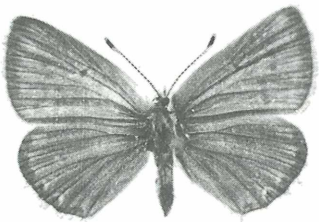
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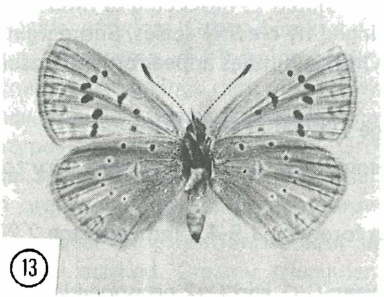
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14

Explanations of the figures

Fig. 1 *Agrodiaetus (S.) myrrhus myrrhinus* STGR. ♂ upperside (Erzurum)
Fig. 2 *Agrodiaetus (S.) myrrhus myrrhinus* STGR. ♂ underside (Erzurum)
Fig. 3 *Agrodiaetus (S.) myrrhus myrrhinus* STGR. ♂ upperside (Erzurum)
Fig. 4 *Agrodiaetus (S.) myrrhus myrrhinus* STGR. ♀ upperside (Erzurum)
Fig. 5 *Agrodiaetus (S.) myrrhus myrrhinus* STGR. ♀ underside (Erzurum)
Fig. 6 *Agrodiaetus (S.) m. araxiana* Holotype (♂) upperside
Fig. 7 *Agrodiaetus (S.) m. araxiana* Holotype (♂) underside
Fig. 8 *Agrodiaetus (S.) m. araxiana* Allotype (♀) upperside
Fig. 9 *Agrodiaetus (S.) m. araxiana* Allotype (♀) underside
Fig. 10 *Agrodiaetus (S.) m. noacki* (Holotype (♂) upperside
Fig. 11 *Agrodiaetus (S.) m. noacki* Holotype (♂) underside
Fig. 12 *Agrodiaetus (S.) m. noacki* Allotype (♀) upperside
Fig. 13 *Agrodiaetus (S.) m. noacki* Allotype (♀) underside
Fig. 14 *Nordmannia marcida* RILEY (♂) underside (Nachtrag zu Atalanta **10**:320)

Another new subspecies, which inhabits environs of Van Lake (East Turkey), is described below:

Agrodiaetus (Sublysandra) myrrhus **noacki** n. subsp.

Holotype (♂), forewing 20 mm. Upperside of wing (fig. 10): Ground colour light bluish-green. Basal parts more suffused with bluish than other parts of wings. Light brown marginal band of forewing broad (ca. 3 mm). Discoidal spot of forewing highly reduced but visible. Ciliae on forewing basally light brown distally white, on hindwing uniformly white.

Underside of wing (fig. 11): Ground colour dark creamy, along outer parts of veins and submarginal markings light brownish. On basal part of hindwing bluish green scales well developed. Blackish spots larger on fore- than hindwing but on both wings much smaller in size than those of other subspecies. Ciliae uniformly white in colour. Whitish triangular mark on hw. indistinct.

Allotype (♀), forewing 16,5 mm. Upperside of wing (fig. 12): Ground colour light brown. Brown discoidal spot on forewing small but visible. Yellowish orange submarginal lunules better developed at anal area of hind- than forewing. Ciliae uniformly light brown.

Underside of wing (fig. 13): Ground colour light yellowish brown, remakably paler than *araxiana*. Metallic greenish scales highly restricted to basal area of hindwing. Usual black spots generally small in size, all ringed by creamy scales. Submarginal markings reduced but visible on both wings. Orange lunules appear only at basal area of hindwing.

Paratypes 69 ♂♂, forewing: 16-20 mm, average 18,37 $\pm$ 1,01 (SD).

General appearance similar to holotype, but some measurable characters vary to some degree. These are given below:

a) Width of marginal band within M3-Cu1 on forewing 1,5-4,5 mm, average 2,27, $\pm$ 0,73 (SD).
b) Length of the black antemarginal dot between Cu1 and Cu2 on upperside of hindwing 0-0,7 mm, average 0,21 $\pm$ 0,17 (SD).

On underside of wings ground colour in some specimens changes into brownish especially on hind- and apical part of forewing. Submarginal markings are also variable. In some specimens they are well marked, or reduced in others. Post discal spots on hindwing are sometimes incomplete. All these characters seem not to be significant taxonomically.

11 ♀♀, forewing 14-18,5 mm, average 17,00 $\pm$ 0,79 (SD).

Generally similar to allotype, but in some specimens ground colour of underside darker in tone and orange lunules on hindwing absent.

Type-material: Holotype (♂), Allotype (♀) and Paratypes (69 ♂♂, 11 ♀♀) were collected by Mr. H. NOACK from „Ostanatolien, Van Gölü ca. 1800 m, 6.-30. Juni 1965". It is deposited in „Landessammlungen für Naturkunde, Karlsruhe".

1 ♂ (Paratype) E. Turkey, Van Province vic. Timar 1750 m, 24.VI.1972, 1 ♂ (Paratype) Van Province, Ercis, Kocapinar 1830 m, 19.VII.1974 A. KOÇAK leg. (in coll. Department of Systematic Zoology, Ankara).

Agrodiaetus (Sublysandra) myrrhus aedon (CHRISTOPH, 1877)

Lycaena aedon CHRISTOPH, 1877 Horae ent. soc. Ross. **12**: 236-237, Tab. 5, fig. 8 „3 ♂♂ Schahkuh".

Redescription: Males (15 ♂♂), forewing: 13-18 mm, average 16,40 ± 1,18 (SD). Upperside of wing: Basal half of forewing generally poorly covered with bluish-green scales, therefore ground colour of outer part of forewing appears to be brownish. Hindwing almost always greenish. Discoidal spot on forewing brown, well developed. Brown marginal band of forewing variable in width but often extends as far as discoidal area. On hindwing marginal line remarkably thicker than other subspecies. Values are given as following: Range 0,35-0,60 mm, average 0,45, ± 0,07 (SD). (Between Cu1-Cu2).

Antemarginal dots are also larger in size than in other subspecies. Values of the dot between the veins of Cu1-Cu2 are 0,9-1,1 mm, average 1,006 ± 0,07 (SD). Ciliae on hindwing and distal part of forewing white, basal half of forewing brownish.

Underside of wing: Ground colour varies from light yellowish brown to light brown. Basal area of hindwing bluish-green. Usual black spots well developed. Submarginal markings dark brown, well developed on both wings, without orange lunules. Creamy triangular marking more or less developed.
Allotype (♀), upperside of wing: Ground colour dark brown. On forewing discoidal spot distinct. Submarginal markings especially on hindwing developed with orange lunules. Ciliae light brown.

Underside of wing: Ground colour light brown, basal greenish scales on hindwing well marked. Creamy triangular marking and submarginal lunules well marked, without orange.

Material examined: 2 ♂♂ „Poin. Schakuh nördl. Persien" ex. coll. DAUB (LNK); 1 ♂ „Iran Elburs Gebirge Nissa 3200-3500 m. 8.-10.VII.1936 leg. BRANDT, 10 ♂♂, 1 ♀ (Allotype) „Nissa W. Teheran C. Elburs Mts. 11600 ft., 15.VII.-3.VIII.1936 ex. coll. WYATT (LNK); 1 ♂ „Nordiran Elbursgebirge oberhalb Ab-Ali 2800 m, 15.VI.-6.VII.1973" leg. K. ROSE, 1 ♂ „Elbursgebirge Paßhöhe zwischen Ab-Ali und Polour ca. 2800 m 14.-19.VII.1974" leg. K. ROSE.

A determination key for the subspecies, based on the males, is presented in the following way:

1(2) Upperside of wings blue as in Europaean *Meleageria daphnis* SCHIFF ..... *myrrhus* H.-S.
2(1) Upperside of wings greenish to bluish-green.
3(4) Greenish scales on upperside of forewing reduced. Dark marginal line on

upperside of hindwing thick (between Cu1 and Cu2 varies from 0,35 to 0,60 mm, average 0,45 mm). Antemarginal dot in the same space larger in size (0,9-1,1 mm, average 1,006 mm) ..... *aedon* CHR.

4(3) Greenish scales on upperside of wings always well developed. On upperside of hindwing dark marginal line thin (between Cu1 and Cu2 varies from 0,10 to 0,35 mm, average 0,19 mm (143 males were measured)). Antemarginal dot in the same space smaller, sometimes absent (It varies from 0 to 1,00 mm, average 0,40 mm (212 males were measured)).

5(6) Ground colour of upper- and underside of wings remarkably lighter than other subspecies. On underside of hindwing triangular creamy marking indistinct, orange lunules on submarginal area absent. Discoidal spot on upperside of forewing small, sometimes reduced or absent. Larger subspecies, forewing length varies from 16 to 20 mm, average 18,37 mm. ..... *noacki* (n. subsp.).

6(5) Ground colour of upper- and underside of wings darker than *noacki*. On underside of hindwing triangular creamy marking more or less developed. Orange submarginal lunules generally present. Discoidal spot of upperside of forewing often well marked, rarely reduced.

7(8) Ground colour of upperside greenish as *Agrodiaetus phyllis phyllis* CHR. Marginal band on forewing narrower (varies from 1,5 mm to 4 mm, average 2,49 mm). Discoidal spot on forewing always present. Smaller subspecies, forewing length varies from 14,5 mm to 17 mm, average 15,77 mm ..... *araxiana* (n. subsp.).

8(7) Ground colour of upperside bluish-green. On forewing marginal band broader (varies from 2 mm to 8,5 mm, average 3,53 (73 ♂♂ were measured)). Discoidal spot on forewing more or less developed rarely absent. Larger subspecies, forewing length varies from 15 mm to 20 mm, average 17,95 mm. (84 ♂♂ were measured) ..... *myrrhinus* STGR.

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